

projecting the lines to generate a group of curves along a surface of a three dimensional form model; and
modifying the [grope] group of curves by deleting a curve or curves in the group of curves.

REMARKS

In response to the Office Action dated July 7, 1999, claim 25 is amended. Claims 1-28 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 103

Claims 1-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Letcher, Jr. The Examiner contends that Letcher, Jr. discloses the claimed invention except that it does not "explicitly teach moving a curve or curves along a surface of the three dimensional form model", but does teach "changing the coordinate of a control point of a curve on the surface of the model". Thus, the Examiner asserts that it would have been obvious to a person of ordinary skill in the art that when a control point of a curve is changed, the curve is changed according to the control point.

The rejections are respectfully traversed.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Examiner. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In rejecting a claim under 35 U.S.C. §103, the Examiner must

provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by *Graham v. John Deere Co.*, 86 S.Ct. 684, 383 U.S. 117, 148 USPQ 459, 469 (1966). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or to combine applied references to arrive at the claimed invention. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

In establishing the requisite motivation, it has been consistently held that both the suggestion and the reasonable expectation of success must stem from the prior art itself, as a whole. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

The present invention performs editing (move, add, delete, or the like) of a line **along a surface of a three-dimensional form model**. The editing is performed by keeping characteristic lines of the three-dimensional form model. That is, the form of the three-dimensional form model is not changed (see explanation after page 28, line 10 of the present application).

On the other hand, Letcher Jr. describes a CAD system that generates a three-dimensional form data without any model to be used. A desired form is generated by using various kinds of entities. However, Letcher Jr. does not

describe editing of a line **along the surface of the** three-dimensional form **model**, as explained below.

The Examiner asserts that Letcher Jr. teaches changing the coordinate of a control point of a curve on the surface of the model (col., 16, lines 5-8 and lines 30-37). The example model, as now defined, can easily be transformed into an extremely wide variety of alternative shapes by changing the coordinates of absolute points, the offsets of relative points, and the parameters of magnets (lines 30-34). Thus, Letcher et al. **changes the form model**.

The Examiner asserts further that when the curve is changed, the surface of the model must change to contain the curve, and this fact implies that the curve changes along the surface of the model as claimed. However, the move of a curve according to the changed curve is not a move **along the surface of the model** as is the case in the present claims.

For the above reasons, the Examiner has not established a *prima facie* case of obviousness to support a rejection of claims 1-28 under 35 U.S.C. § 103. Thus, claims 1-28 are patentable over Letcher et al. and their allowance is respectfully solicited.

CONCLUSION

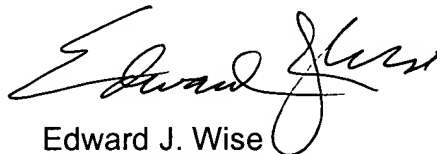
Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an

Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY

A handwritten signature in black ink, appearing to read "Edward J. Wise", written in a cursive style.

Edward J. Wise
Registration No. 34,523

600 13th St., NW
Washington, DC 20005-3096
(202) 756-8600 EJW:bgk
DATE: November 3, 1999
Facsimile: (202) 756-8087